

Applicant : Shimon Sakaguchi  
Serial No. : 09/284,114  
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Attorney's Docket No.: 13750-002001 / PH-425PCT-  
US

### AMENDMENT

Please amend the application as follows:

#### In the claims:

At the request of the Examiner, a clean copy of all pending claims is provided. However, only claims 12, 13, 15, 17, and 18 are being replaced with amended claims 12, 13, 15, 17, and 18.

18.

-- 10. A method of identifying a therapy that decreases a symptom of rheumatoid arthritis comprising:  
(a) treating a mouse of the isolated mouse strain of claim 12 with a potential therapy;  
and  
(b) determining whether the potential therapy decreases a symptom of rheumatoid arthritis in the mouse.

11. The method of claim 10, wherein the symptom is selected from the group consisting of arthritis in a foreleg or hind leg joint, joint stiffening, appearance of pannus, lymphocyte infiltration into joint cartilage or bone, destruction of joint cartilage or bone, production of rheumatoid factor or autoantibody against type II collagen, and hypergammaglobulinemia.

12. (Amended) An isolated mouse strain from BALB/C mice homozygous for a trait of developing natural onset of rheumatoid arthritis.

13. (Amended) A mouse from a mouse strain capable of developing rheumatoid arthritis, wherein an embryo of the mouse strain is deposited as ATCC accession No. FERM BP-7790.

14. The isolated mouse strain of claim 12, wherein the rheumatoid arthritis represents one or more symptoms selected from the group consisting of: arthritis in a foreleg or hind leg

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joint, joint stiffening, appearance of pannus, lymphocyte infiltration into joint cartilage or bone, destruction of joint cartilage or bone, production of rheumatoid factor or autoantibody against type II collagen, and hypergammaglobulinemia.

15. (Amended) A method of producing offspring of an isolated mouse strain from BALB/C mice, wherein the isolated mouse strain is homozygous for a trait of developing rheumatoid arthritis, the method comprising the steps of:

- (a) mating between mice of the isolated mouse strain in a maintained colony repeatedly to produce offspring;
- (b) screening the offspring for the trait of developing natural onset of rheumatoid arthritis.

16. The method of claim 15, wherein the rheumatoid arthritis represents one or more symptoms selected from the group consisting of: arthritis in a foreleg or hind leg joint, joint stiffening, appearance of pannus, lymphocyte infiltration into joint cartilage or bone, destruction of joint cartilage or bone, production of rheumatoid factor or autoantibody against type II collagen, and hypergammaglobulinemia.

17. (Amended) A method for producing a mouse strain from BALB/C mice being homozygous for a trait of developing rheumatoid arthritis, comprising the steps of:

- a) repeated mating between BALB/C mice in a closed colony to produce offspring;  
and  
b) screening the offspring for the trait of developing natural onset of rheumatoid arthritis.

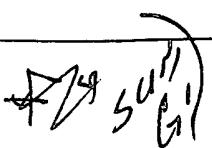
18. (Amended) The method of claim 17, wherein the mouse strain is the mouse strain from an embryo deposited as ATCC accession No. BP-7790.

19. The method of claim 17, wherein the rheumatoid arthritis represents one or more symptoms selected from the group consisting of: arthritis in a foreleg or hind leg joint, joint

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stiffening, appearance of pannus, lymphocyte infiltration into joint cartilage or bone, destruction of joint cartilage or bone, production of rheumatoid factor or autoantibody against type II collagen, and hypergammaglobulinemia. --

 Please add new claim 20.

-- 20. (New) The mouse strain of claim 12, wherein a mouse of the strain develops rheumatoid arthritis by six months of age. --